

1058

B.Sc. (Hons) Bio-Informatics

Sixth Semester

BIN-6002: Introduction to Proteins and Proteomics

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) Distinguish between polar and non polar covalent bonds
- b) What are bonds in proteins?
- c) Differentiate between atom and bonds.
- d) What is LC/MS?
- e) What are glycosylation of proteins?
- f) What is main difficulties Edman degradation?
- g) How sedimentation analysis is useful for protein analysis.
- h) How we benefits with the data for Mass spectroscopy in disease diagnosis. (8x1½)

UNIT – I

- II.
 - a) Discuss the methods of protein solubilisation.
 - b) How proteome understanding is important in understanding of human. (2x6)
- III.
 - a) Discuss the gel filtration methods & its applications
 - b) Discuss the different protein array and it applications. (2x6)
- IV.
 - a) Diagrammatically explain MS/MS?
 - b) Discuss Edman degradation method. (2x6)

UNIT – II

- V.
 - a) What is Phosphoraylation & its types?
 - b) Distinguish Protein - protein interaction and it significance. (2x6)

P.T.O.

(2)

- VI. a) Discuss method for two hybrid system & its application.
b) Write a note on GST pull down and its significance. (2x6)
- VII. a) Write a note on GRID and DIP.
b) Discuss the role of String and its application. (2x6)

x-x-x